

Amendments to the Claims

This listing of claims shall replace all prior versions, and listings, of claims in the instant application.

1. (currently amended) An A monolithic interpositional arthroplasty implant for use in repairing ginglymus joints such as the joints of the ankle, consisting essentially of a monolithic tibiotalar implant having a first major surface adapted shaped to be positioned against a tibia and shaped to allow the tibia to articulate across the first major surface; and a second major surface adapted shaped to be positioned against a talus, and a bead shaped structure proximate to the implant's anterior side sized to engage the neck of the talus.

2. (currently amended) An implant according to claim 1 wherein the monolithic tibiotalar implant ~~further comprises~~ has one or more ~~additional~~ external structures adapted to improve retention of the implant within the joint site.

3. (currently amended) An implant according to claim 2 wherein the bead shaped structure is ~~integral with~~ located on the implant's anterior side.

4. (currently amended) An implant according to claim 1 wherein the implant is comprised of ~~comprises~~ a biomaterial.

5. (original) An implant according to claim 4 wherein the biomaterial is a polyurethane.

6. (original) An implant according to claim 5 wherein the polyurethane is biocompatible with respect to cytotoxicity, sensitization, genotoxicity, chronic toxicity, and carcinogenicity.

7. (currently amended) An implant according to claim 5 wherein the polyurethane has a Shore hardness of at least about 60 D or less.

8 –18. (cancelled).

19. (previously presented) A method of repairing a tibiotalar joint, comprising the steps of providing and implanting an implant according to claim 1, the implant being inserted through an incision anterior to the tibiotalar joint.

20. (currently amended) An implant according to claim 1 inserted into a ginglymus joint, the ginglymus joint being a tibiotalar joint, the single-piece monolithic implant's first major surface positioned against the tibia, its second major surface positioned against the talus, and ~~an integral~~ the bead shaped structure proximate the implant's anterior side engaging is engaged with a neck of the talus.

21. (cancelled).

22. (currently amended) A monolithic device for implantation into an ankle joint space within the body of a mammal, the device consisting essentially of a monolithic structure fabricated from a biocompatible, biodurable material that is ~~adapted~~ shaped to be inserted into the joint compartment, the monolithic structure including a first major surface ~~adapted~~ shaped to be positioned against a tibia, such that the tibia can articulate across the first major surface, and a second major surface ~~adapted~~ shaped to be positioned against a talus, wherein the ~~implanted~~ monolithic device is substantially free of anchoring portions that need to be attached to the bone, cartilage, ligaments or other tissue, wherein the ~~implanted device~~ monolithic device is shaped so that it has minimal translation, rotation, or other undesired movement or dislocation within or from the joint space.

23. (cancelled).

24. (previously presented) A device according to claim 22 wherein stability of the device within the joint space is provided by the congruency of the device to the talus.

25. (currently amended) An A monolithic interpositional arthroplasty device for use in repairing joints of the ankle, consisting essentially of a monolithic interpositional tibiotalar implant that provides a first major surface adapted shaped to be positioned against a tibia and shaped to allow the tibia to articulate across the first major surface, and a second major surface adapted shaped to be positioned against a talus, wherein the implant ~~has~~ comprises an integral a bead shaped structure proximate its anterior side adapted shaped to engage the neck of a talus to improve fixation to the talus, wherein the monolithic implant ~~comprises~~ is comprised of a polyurethane that includes both hard and soft segments.